(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 1 September 2005 (01.09.2005)

PCT

(10) International Publication Number WO 2005/081447 A1

(51) International Patent Classification⁷: H04L 1/22, 12/26

(21) International Application Number:

PCT/US2005/004422

(22) International Filing Date: 14 February 2005 (14.02.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/544,622 13 February 2004 (13.02.2004) US 60/640,844 30 December 2004 (30.12.2004) US

(71) Applicant (for all designated States except US): ALCA-TEL WIRELESS, INC. [US/US]; 3400 W. Plano Parkway, Plano, TX 75075 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): XU, Jianming [US/US]; 4305 Vanderpool Lane, Plano, TX 75024 (US). BERTEAU, Charles, Marvin [US/US]; 8328 Barber Oak Drive, Plano, TX 75025 (US). NAIM, Ghassan [CA/US]; 5413 Naaman Forest Boulevard #836, Garland, TX 75044

(US). MADHAVAPEDDY, Seshagiri, Rao [IN/US]; 2521 Big Horn Lane, Richardson, TX 75080 (US). KOHLI, Pardeep [US/US]; 8621 High Meadows Dr., Plano, TX 75025 (US). FENG, Shiang, Yueng [US/US]; 3402 Fox Meadows Drive, Colleyville, TX 76034 (US).

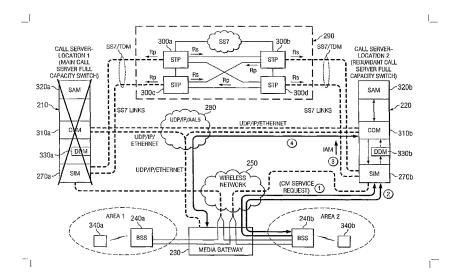
(74) Agent: SMITH, Jessica, W.; Corporate Counsel, Alcatel, 3400 W. Plano Parkway, M/S LEGL2, Plano, TX 75075 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR PROVIDING AVAILABILITY AND RELIABILITY FOR A TELECOMMUNICATION NETWORK ENTITY



(57) Abstract: Geographical redundancy and an efficient switchover process to redundant equipment (210) is achieved by separating active main equipment (220) and standby redundant equipment in different geographical locations so that failures can be avoided in the event of a natural disaster or other event that affects an entire building or region. In addition, partial switchover can be performed for components or functions that become inoperative to corresponding redundant components in the standby equipment. To provide further redundancy and prevent unneeded switchovers, status or heartbeat messages are transmitted between the active main equipment and standby redundant equipment over two different networks.



WO 2005/081447 A1



FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

— of inventorship (Rule 4.17(iv)) for US only

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.